

REMARKS

In view of the amendments proposed above, Applicants respectfully request consideration of the following remarks.

Anticipation Rejections Under 35 U.S.C. § 102

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989).

Anticipation Rejection Based on United States Patent 5,754,796 to Wang et al.

Claims 1-3, 5-14, 16-26, 28-50, and 52-58 were rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent 5,754,796 to Wang et al. (hereinafter “Wang”). Applicant respectfully traverses this rejection as set forth below.

Independent claim 1, as amended, recites:

1. An apparatus comprising:
a mounting portion to couple with a first card connector on a circuit board, the mounting portion including a first communication path to route at least one signal line from the first card connector on the circuit board to a first card connector on the mounting portion; and
a routing portion **to couple with a second card connector on the circuit board**, the routing portion including a communication path, **the communication path of the routing portion to route at least one signal line from the second card connector on the circuit board to the mounting portion**, a second communication path of the mounting

portion to route the at least one signal line of the second card connector
on the circuit board to a second card connector on the mounting portion.

Independent claim 9 (not amended) recites:

9. An apparatus comprising:
- a circuit board;
 - a processor disposed on the circuit board;
 - a chip set disposed on the circuit board and coupled to the processor;
 - a first card connector disposed on the circuit board and coupled to the chip set
by at least one signal line;
 - a second card connector disposed on the circuit board and coupled to the chip set
by at least one signal line;
 - a mounting portion secured in the first card connector on the circuit board, the
mounting portion including a first communication path to couple the at
least one signal line of the first card connector on the circuit board to a
first card connector disposed on the mounting portion; and
 - a routing portion **secured in the second card connector on the circuit board**,
the routing portion including a communication path **to couple the at least
one signal line of the second card connector on the circuit board to
the mounting portion**, a second communication path of the mounting
portion to couple the at least one signal line of the second card connector
on the circuit board to a second card connector disposed on the mounting
portion.

Each of independent claims 21, 33, 36, and 46 recites some limitations similar to
those recited in claim 1 or claim 9.

To reject the claims, the Examiner has relied upon the Wang reference and, in
particular, an embodiment disclosed in FIG. 7 of Wang. Referring to FIG. 7 of Wang,
disclosed is an extension card 10B coupled with a motherboard 50B. The extension card
10B is plugged into a card connector 51A on the mother board 50B, as shown in the

figure, wherein the signals provided by the motherboard card connector 51A are transmitted to the card connector 12A on extension card 10B. See Column 2, Lines 40-45. A coupling device 60B connects the remaining card connectors 12B, 12C of the extension card to the motherboard 50B. See Column 2, Lines 45-54.

The coupling device 60B comprises a first connector 67 disposed on the extension card 10B and a second connector 68 disposed on the motherboard 50B. Column 3, Lines 12-16. Note, however, that the second connector 68 on motherboard 50B is not a card connector for receiving a peripheral card. Rather, as stated in Wang:

The first connector 67 shown in FIG. 6 is a male connector. The second connector 68 shown in FIG. 7 is a female connector. Alternatively, the first connector 67 can be a female connector, and the second connector can be a male connector.

The first connector 67 of all coupling devices 60B may be arranged at two opposite ends (see FIG. 8), at one end (see FIG. 9), at two opposite ends (see FIG. 10), or at one side (see FIG. 11), and respectively connected to the respective contacts of the interface slots 12B-C to provide the respective exclusive signals 72B-C. **The second connectors 68 are respectively connected to the exclusive signals 72B-C of the extension slots 51B-C of the mother board 50B. When the first connectors are respectively connected to the second connectors 68, the exclusive signals 72B-C of the extension slots 51B-C are respectively transmitted to the interface slots 12B-C so that the interface slots 12B-C can provide the exclusive signals 72B-C.** Column 3, Lines 16-33.

Therefore, as specifically described in Wang, the second connector 68 on motherboard 50B is not a card connector for receiving a peripheral card. Rather, the connector 68 comprises an additional connector disposed on motherboard 50B that is connected to the extension slots 51B, 51C on the motherboard, so that when the first

connector 67 is coupled with the second connector 68, the signals 72B, 72C of the extension slots 51B, 51C are transmitted to the interface slots 12B, 12C on extension card 10B. Note also that, in FIGS. 6 and 7, the first and second connectors 67, 68 are not illustrated as card connectors, as are the slots 12A-C and 51A-C. In summary, Wang discloses a customized motherboard 50B having an extra connector 68 for routing signals from a number of card connectors 51B-C on that motherboard to a number of card connectors 12B-C (via connector 67) on a peripheral card 10B; however, this extra connector 68 is not itself a card connector for receiving a peripheral card.

Thus, Wang does not disclose a routing portion that is secured to or coupled with a “second card connector” on a circuit board and that includes a communication path to route a signal line of that second card connector to a mounting portion, as presently claimed. Each of independent claims 1 and 33 has been amended to clarify that the routing portion is coupled with a card connector on the circuit board (the other independent claims already including similar limitations).

In addition, as noted above, Wang discloses the use of a customized motherboard 50B having an added connector 68. As previously pointed out by Applicant, avoiding the use of customized motherboards is one problem the present invention overcomes.

Specification, at 0008 and 0024.

Because Wang fails to disclose at least the above-noted limitations of independent claims 1, 9, 21, 33, 36, and 46, respectively, each of these claims is novel in view of Wang. Also, claims 2-3, 5-8, and 40-41 are allowable as depending from novel independent claim 1; claims 10-14, 16-20, and 42-43 are allowable as depending from novel independent claim 9; claims 22-26, 28-32, and 44-45 are allowable as depending

from novel independent claim 21; claims 34-35 are allowable as depending from novel independent claim 33; claims 37-39 are allowable as depending from novel independent claim 36; and claims 47-50 and 52-58 are allowable as depending from novel independent claim 46.

Claim Objections - Allowable Subject Matter

Claims 4, 15, 27, and 51 were objected to as being dependent upon a rejected base claim, but each of these claims would be allowable if rewritten in independent form.

Office Action, at page 13. As set forth above, each of independent claims 1, 9, 21, and 46 is patentable in view of the cited prior art. Thus, Applicant submits that each of claims 4, 15, 27, and 51 is patentable as written in dependent form.

CONCLUSION


Applicant submits that claims 1-58 are in condition for allowance and respectfully requests allowance of such claims.

Please charge any shortages and credit any overages to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, L.L.P.

Date: July 15, 2003


Kerry D. Tweet
Registration No. 45,959

12400 Wilshire Blvd.
Seventh Floor
Los Angeles, CA 90025
(503) 684-6200

KDT/acf